

Fig. 1

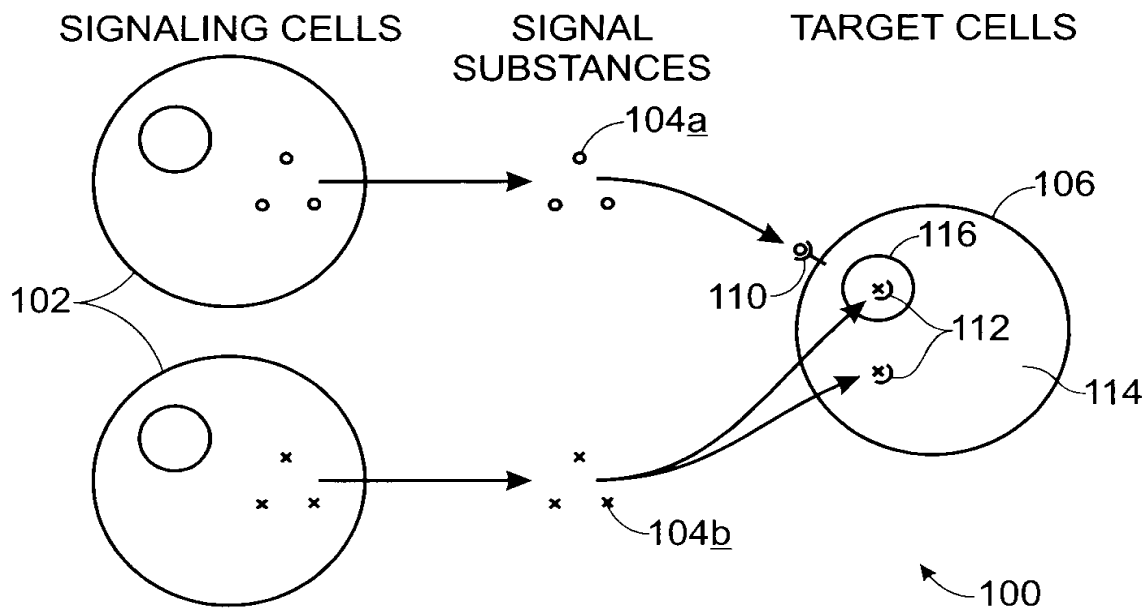


Fig. 2

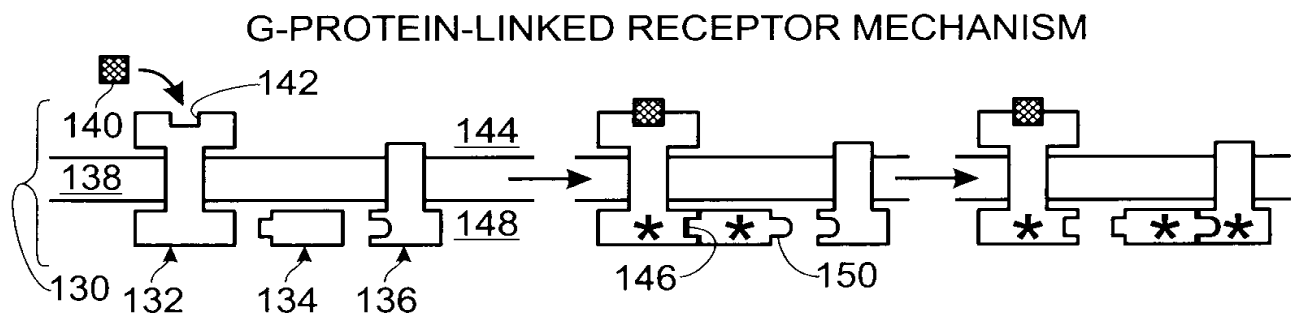


Fig. 3

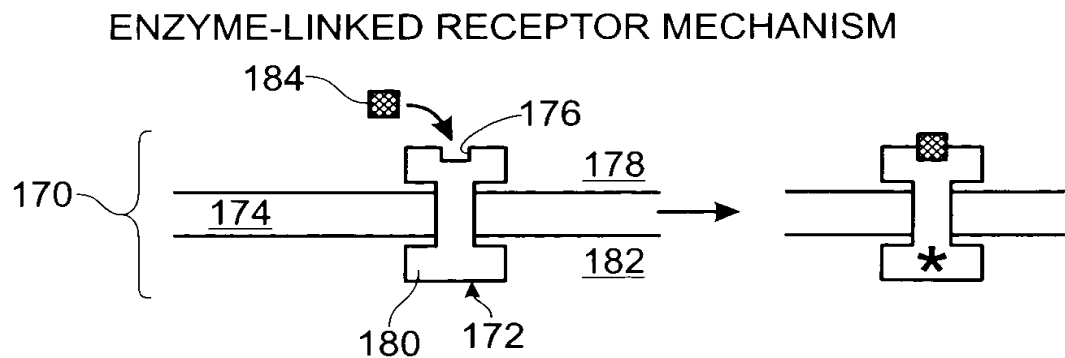
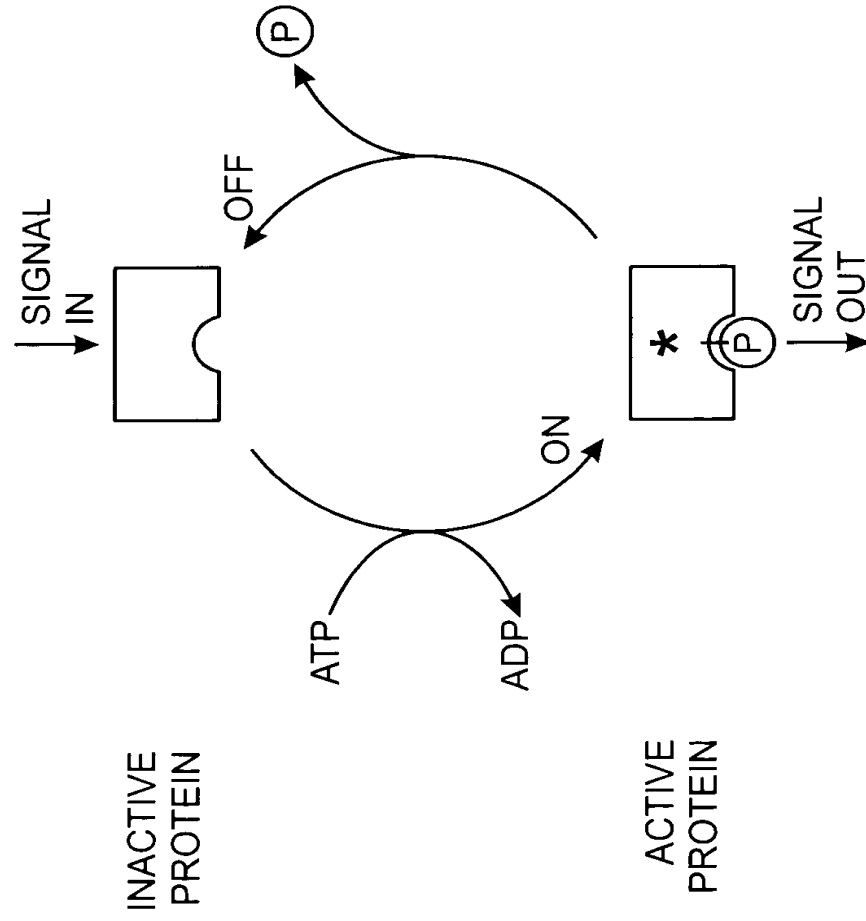


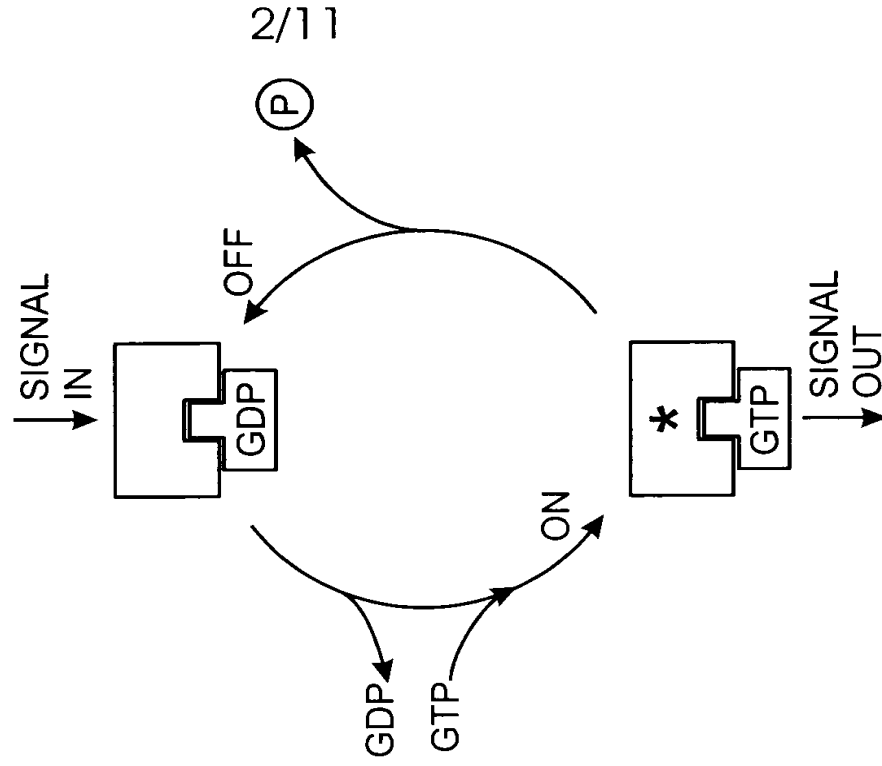
Fig. 4

INTRACELLULAR SIGNALING PATHWAYS

A PHOSPHORYLATION  
PATHWAY



B GTP-BINDING  
PATHWAY



2/11

Fig. 5

## CYCLIC NUCLEOTIDE ASSAY

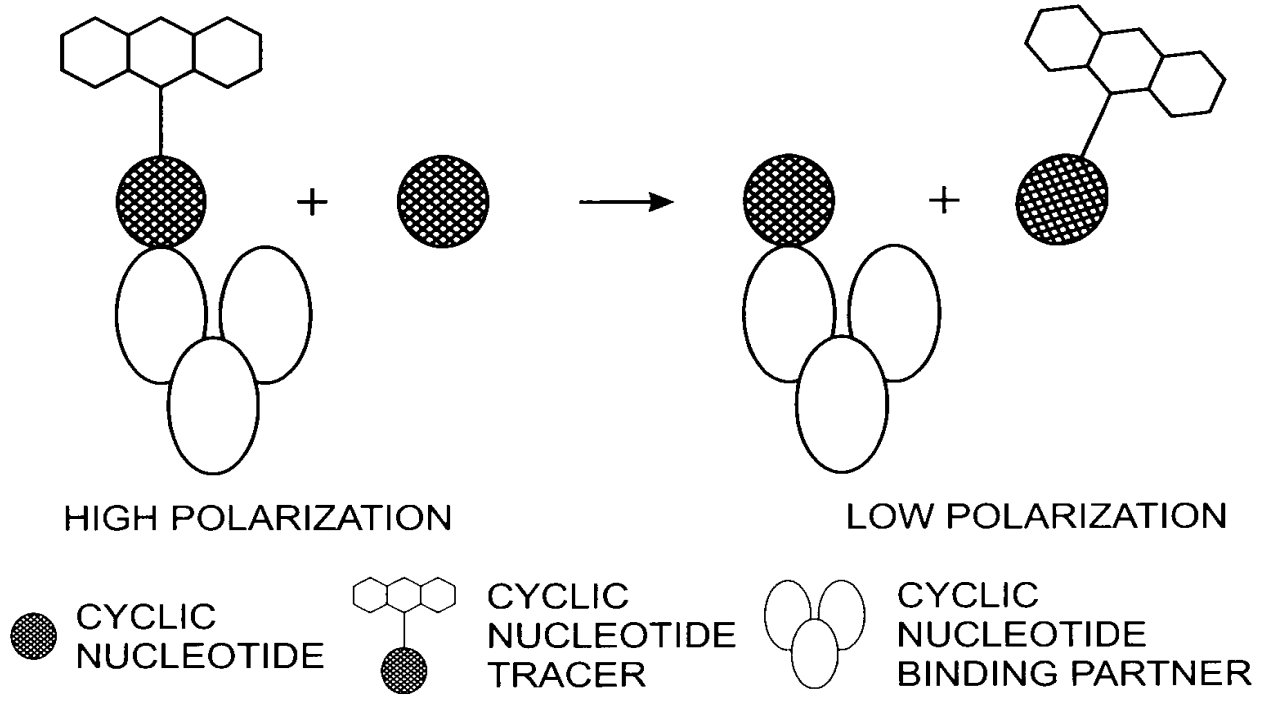


Fig. 6

## GTP-BINDING PROTEIN ASSAY

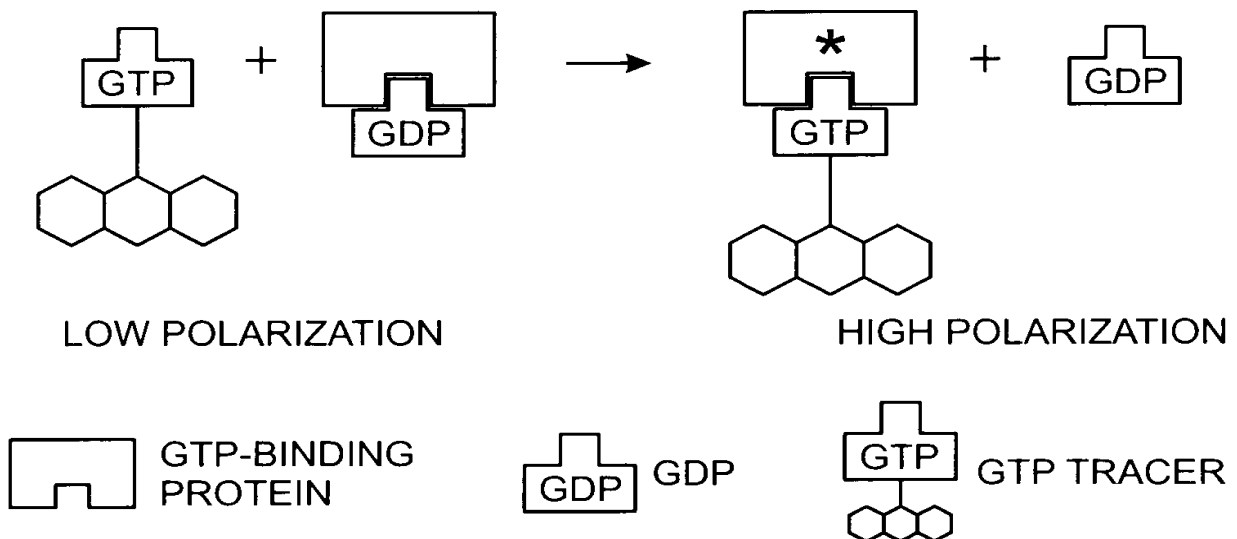
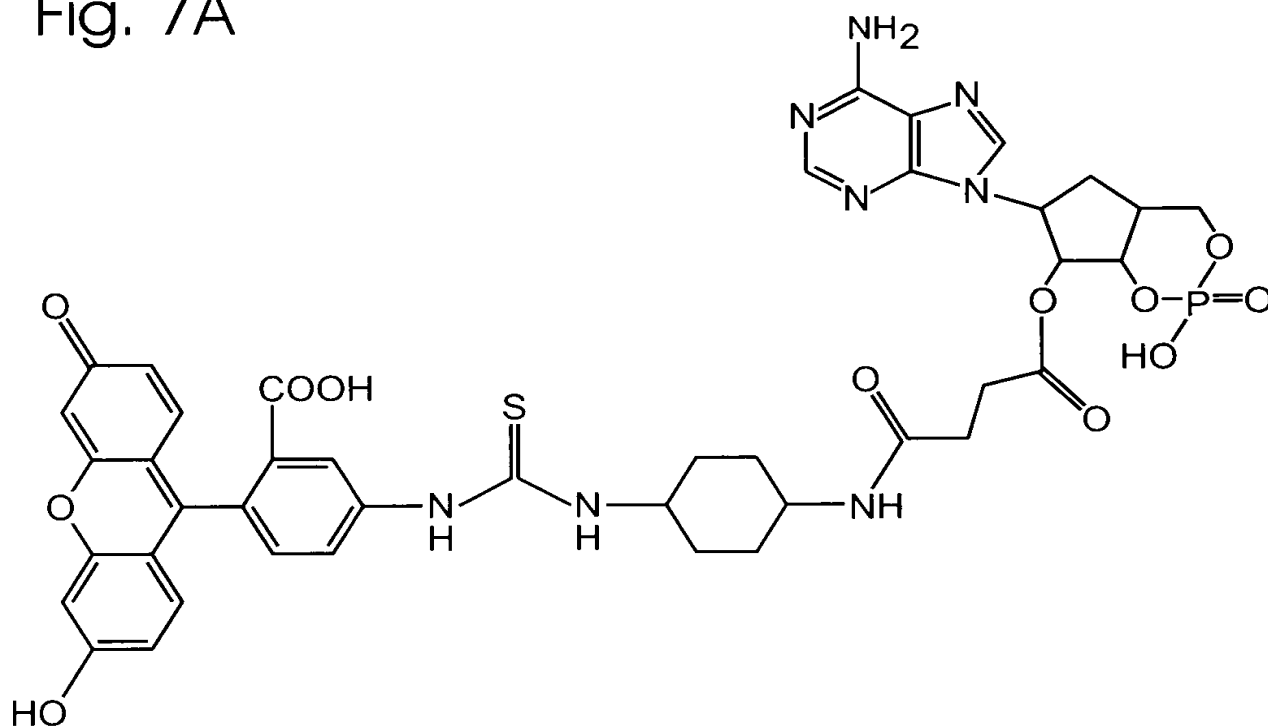
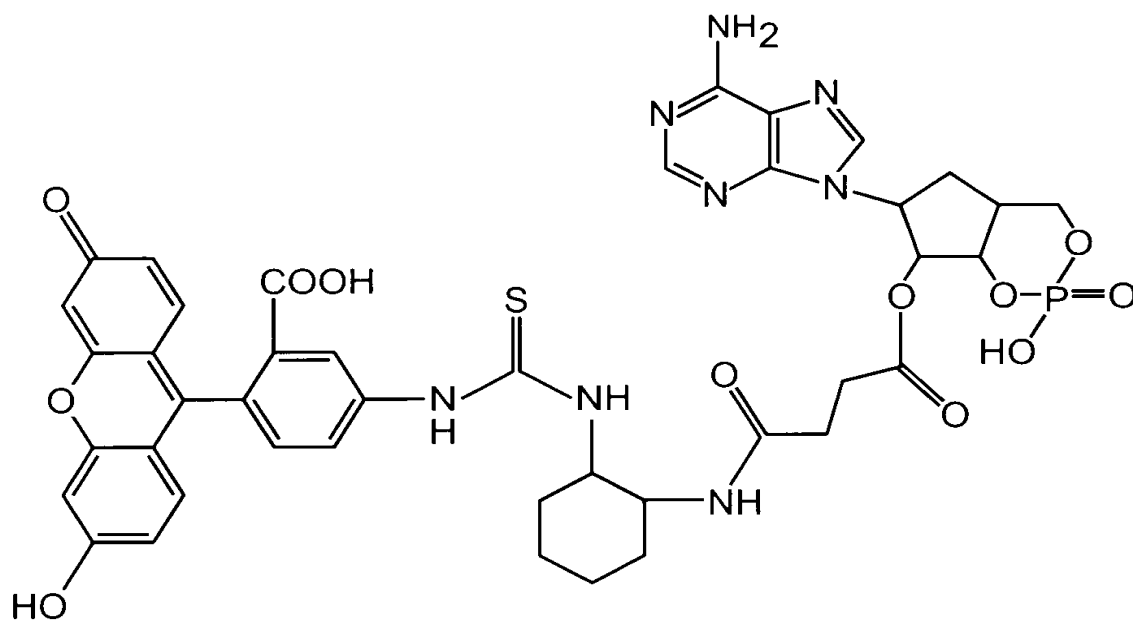


Fig. 7A

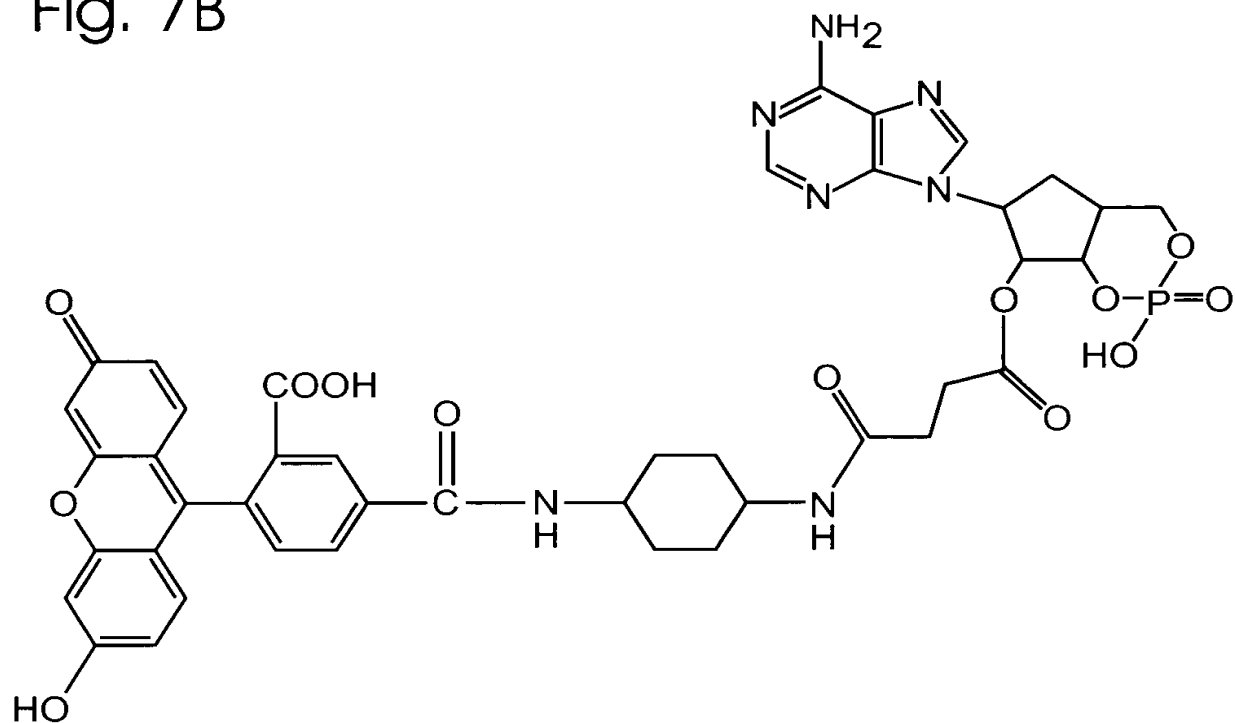


fluorescein-ITC-1,4-DACHsuccinimidyl cAMP

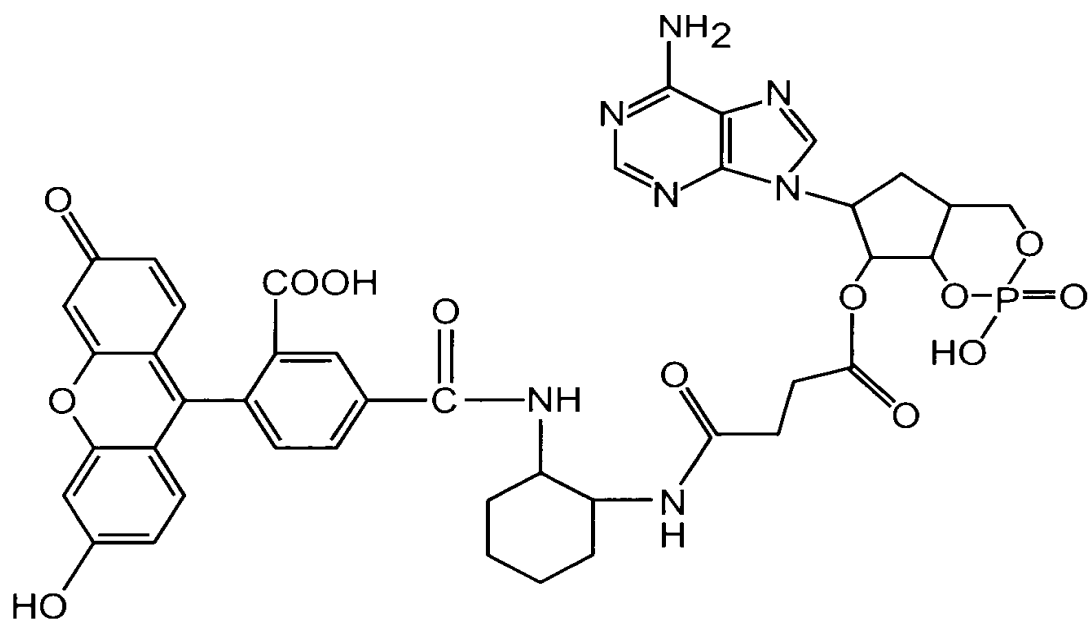


fluorescein-ITC-1,2-DACHsuccinimidyl cAMP

Fig. 7B



carboxyfluorescein-1,4-DACHsuccinimidyl cAMP



carboxyfluorescein-1,2-DACHsuccinimidyl cAMP

Fig. 8A

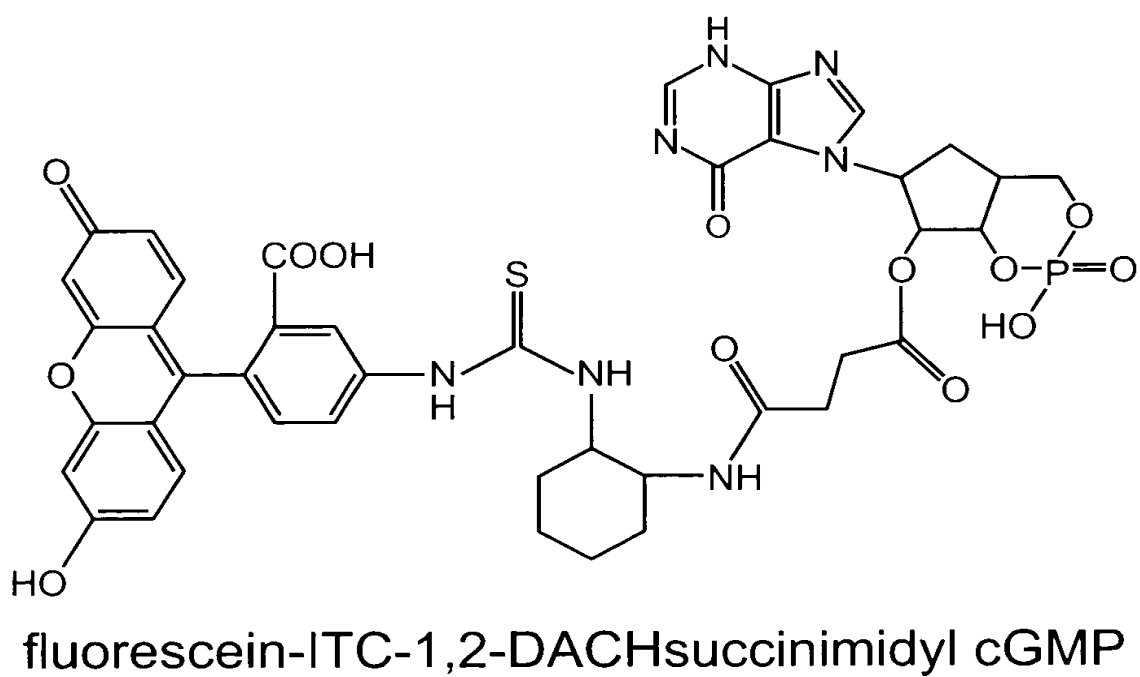
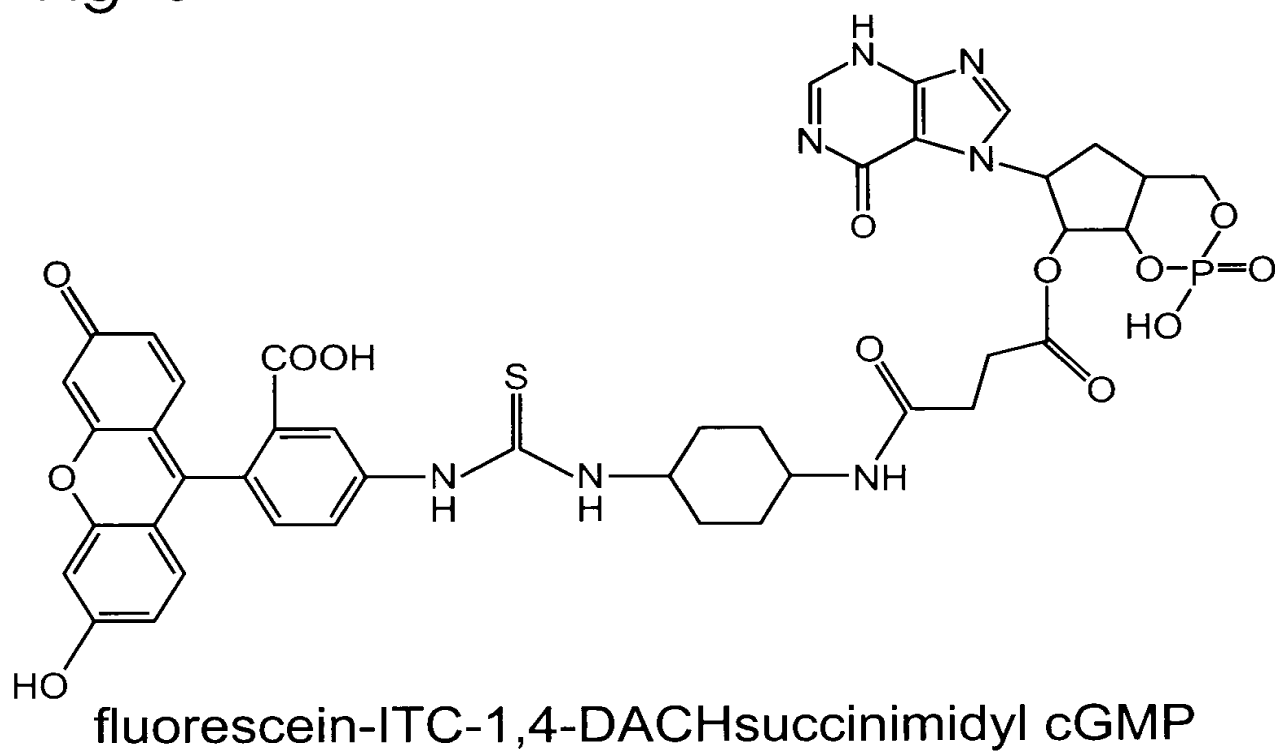
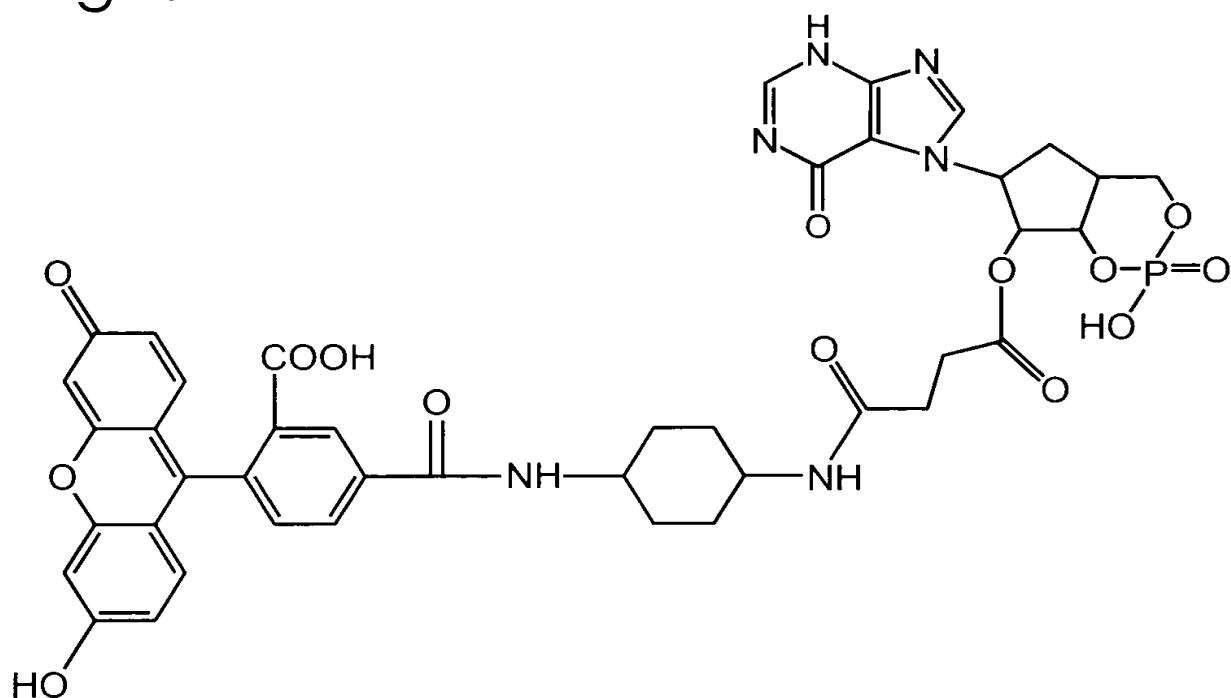
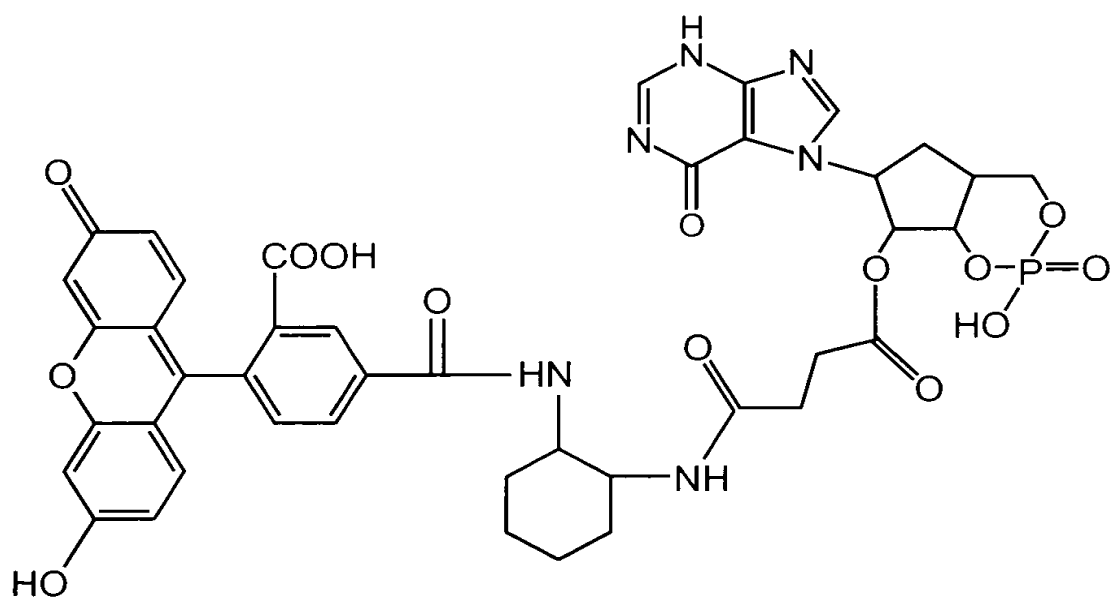


Fig. 8B



carboxyfluorescein-1,4-DACHsuccinimidyl cGMP



carboxyfluorescein-1,2-DACHsuccinimidyl cGMP

Fig. 9A

	1 [cAMP CALIBRATORS]	2 [CONTROLS]	3 [SAMPLES]
A	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L 10 $\mu$ M CALIBRATOR 10 $\mu$ L cAMP TRACER WORKING STOCK	40 $\mu$ L BUFFER	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L SAMPLE 1 10 $\mu$ L cAMP TRACER WORKING STOCK
B	↓	↓	↓
C	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L 3.33 $\mu$ M CALIBRATOR 10 $\mu$ L cAMP TRACER WORKING STOCK	↓	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L SAMPLE 2 10 $\mu$ L cAMP TRACER WORKING STOCK
D	↓	↓	↓
E	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L 1.11 $\mu$ M CALIBRATOR 10 $\mu$ L cAMP TRACER WORKING STOCK	30 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L SAMPLE 3 10 $\mu$ L cAMP TRACER WORKING STOCK
F	↓	↓	↓
G	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L 0.37 $\mu$ M CALIBRATOR 10 $\mu$ L cAMP TRACER WORKING STOCK	↓	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L SAMPLE 4 10 $\mu$ L cAMP TRACER WORKING STOCK
H	↓	↓	↓



Fig. 9B

	1 [cAMP CALIBRATORS]	2 [CONTROLS]	3 [SAMPLES]
I	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L 0.12 $\mu$ M CALIBRATOR 10 $\mu$ L cAMP TRACER WORKING STOCK	30 $\mu$ L BUFFER 10 $\mu$ L TRACER WORKING STOCK	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L SAMPLE 5 10 $\mu$ L cAMP TRACER WORKING STOCK
J	↓	↓	↓
K	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L 0.041 $\mu$ M CALIBRATOR 10 $\mu$ L cAMP TRACER WORKING STOCK	↓	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L SAMPLE 6 10 $\mu$ L cAMP TRACER WORKING STOCK
L	↓	↓	↓
M	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L 0.014 $\mu$ M CALIBRATOR 10 $\mu$ L cAMP TRACER WORKING STOCK	20 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L cAMP TRACER WORKING STOCK	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L SAMPLE 7 10 $\mu$ L cAMP TRACER WORKING STOCK
N	↓	↓	↓
O	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L 0.005 $\mu$ M CALIBRATOR 10 $\mu$ L cAMP TRACER WORKING STOCK	↓	10 $\mu$ L BUFFER 10 $\mu$ L cAMP Ab WORKING STOCK 10 $\mu$ L SAMPLE 8 10 $\mu$ L cAMP TRACER WORKING STOCK
P	↓	↓	↓

Fig. 10

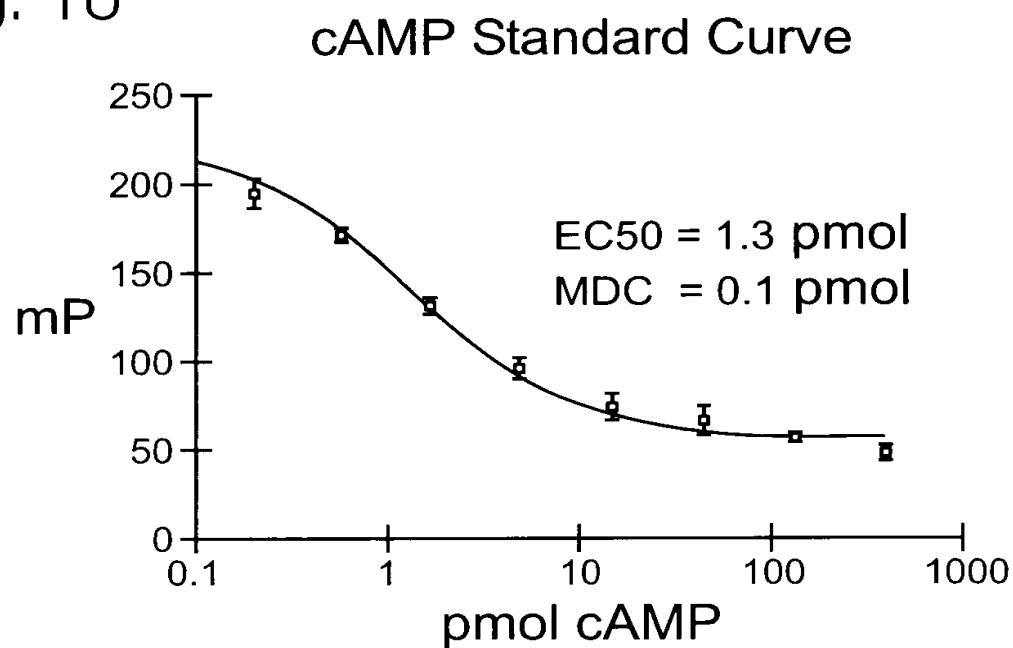


Fig. 11

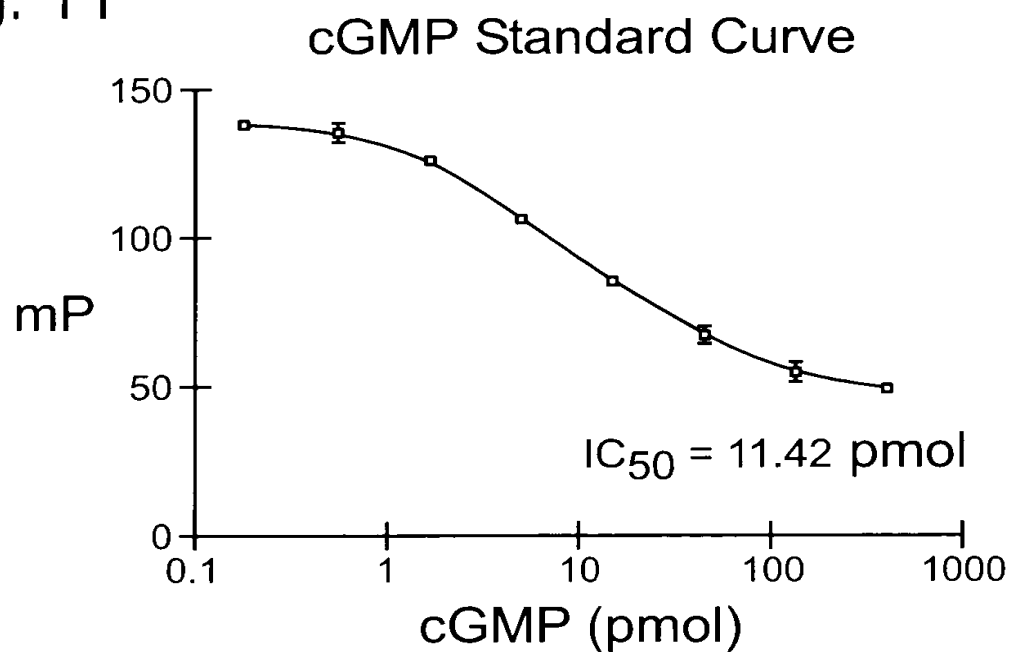


Fig. 12

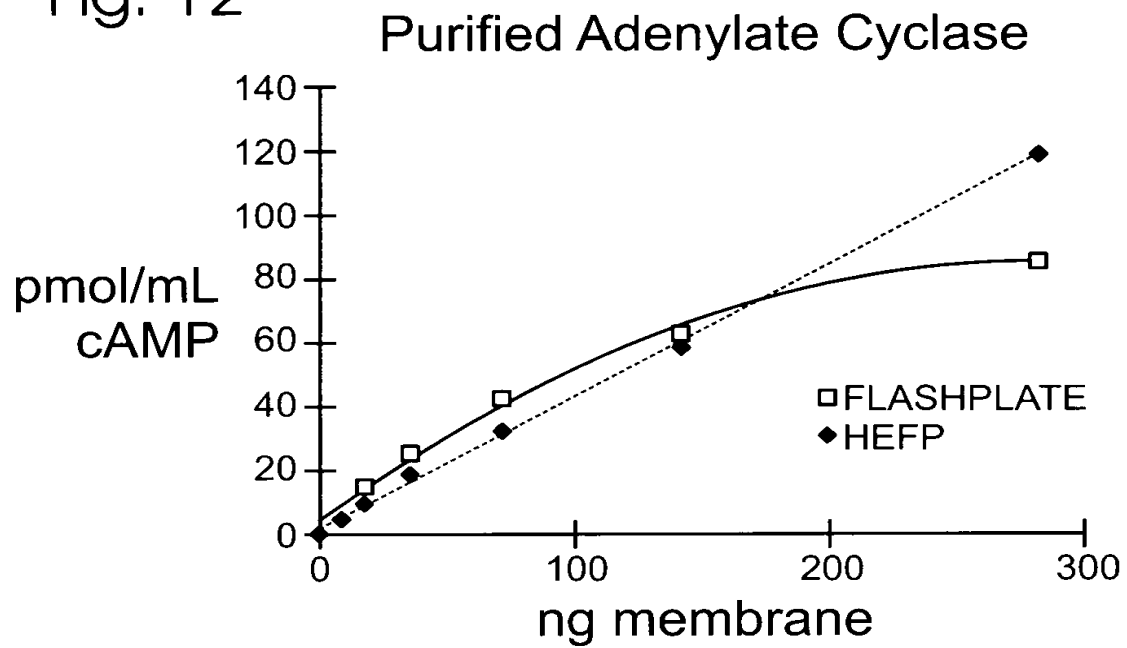


Fig. 13

